



ISIS0085-100 (ISIS-2960US.C2)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lex M. Cowsert, et al. : Art Unit: Not Yet Assigned
Serial No.: 10/649,467 : Examiner: Not Yet Assigned
Filed: August 27, 2003 :
For: IDENTIFICATION OF GENETIC :
TARGETS FOR MODULATION
BY OLIGONUCLEOTIDES AND
GENERATION OF
OLIGONUCLEOTIDES FOR
GENE MODULATION

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S I R :

Pursuant to 37 C.F.R. § 1.56 and in accordance with §§ 1.97-1.98,
information relating to the above-identified application is hereby disclosed on the
attached PTO/SB/08A. Inclusion of information in this statement is not to be construed
as an admission that this information is material as that term is defined in 37 C.F.R. §
1.56(b).

No first Official Action has yet been received and it is presumed that none has yet been mailed. No fee or certification is required. 37 C.F.R. § 1.97(b).

Respectfully submitted,



Paul K. Legaard
Attorneys for Applicant

Enclosures:
PTO/SB/08A

Dated: 17 Dec 2008

Cozen O'Connor
1900 Market Street
Philadelphia, PA 19103
Tel: 215-665-2000



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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

		Application Number	10/649,467
		Filing Date	August 27, 2003
		First Named Inventor	Lex M. Cowser
		Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	26	Attorney Docket Number	ISIS0085-100 (ISIS-2960US.C2)

ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/ Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosure(s) (please identify below):		
<table><tr><td>Remarks</td><td>References were previously supplied in parent application 09/067,636, filed April 28, 1998.</td></tr></table>			Remarks	References were previously supplied in parent application 09/067,636, filed April 28, 1998.
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Paul K. Legaard/Reg. No. 38,534		
Signature			
Date	17 October 2003		

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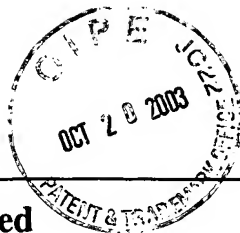
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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. ISIS0085-100	Serial No. 10/649,467
		Applicant Lex M. Cowsert et al.	
		Filing Date August 27, 2003	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
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	AB	Albert et al., "Antisense knockouts: molecular scalpels for the dissection of signal transduction", <i>TIPS</i> , 1994 , 15, 250-254	
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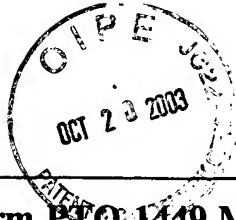
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		Applicant Lex M. Cowsert et al.	
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	BI	Nowak, "Entering the Postgenome Era", <i>Science</i> , 1995 , 270, 368-371	
	BJ	Oberhauser et al., "Effective incorporation of 2'-O-methyl-oligonucleotides into liposomes and enhanced cell association through modification with thiocholesterol", <i>Nucl. Acids Res.</i> , 1992 , 20(3), 533-538	
	BK	Saison-Behmoaras et al., "Short modified antisense oligonucleotides directed against Ha-ras point mutation induce selective cleavage of the mRNA and inhibit T24 cells proliferation", <i>EMBO J.</i> , 1991 , 10(5), 1111-1118	
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	BM	SantaLucia et al., "Improved Nearest-Neighbor Parameters for Predicting DNA Duplex Stability", <i>Biochem.</i> , 1996 , 35, 3555-3562	
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	BN	Shea et al., "Synthesis, hybridization properties and antiviral activity of lipid-oligodeoxynucleotide conjugates", <i>Nucl. Acids Res.</i> , 1990 , 18(13), 3777-3783	
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	BT	4,469,863	09/04/84	Ts'o et al.	536	27
	BU	4,476,301	10/09/84	Imbach et al.	536	27
	BV	4,587,044	05/06/86	Miller et al.	530	211
	BW	4,605,735	08/12/86	Miyoshi et al.	536	27
	BX	4,667,025	05/19/87	Miyoshi et al.	536	27
	BY	4,762,779	08/09/88	Snitman	435	6
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	CA	4,824,941	04/25/89	Gordon et al.	530	403
	CB	4,828,979	05/09/89	Klevan et al.	435	6
	CC	4,835,263	05/30/89	Nguyen et al.	536	27
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	CE	4,876,335	10/24/89	Yammane et al.	536	27
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	CG	4,948,882	08/14/90	Ruth	536	27

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Examiner Initial		Document No.	Date	Country	Translation YES	NO
	CH	WO 86/07363 (claims only included)	12/18/86	PCT	X	
	CI	WO 94/02499	02/03/94	PCT	X	
	CJ	WO 94/17093	08/04/94	PCT	X	

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List of Patent and Publications
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Patent and Trademark Office

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U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
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	CL	4,981,957	01/01/91	Lebleu et al.	536	27
	CM	5,013,830	05/07/91	Ohtsuka et al.	536	27
	CN	5,023,243	06/11/91	Tullis	514	44
	CO	5,034,506	07/23/91	Summerton et al.	528	391
	CP	5,082,830	01/21/92	Brakel et al.	514	44
	CQ	5,109,124	04/28/92	Ramachandran et al.	536	27
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	CT	5,118,802	06/02/92	Smith et al.	536	27
	CU	5,130,302	12/24/91	Neustadt	514	211
	CV	5,134,066	07/28/92	Rogers et al.	435	91
	CW	5,138,045	08/11/92	Cook et al.	536	27
	CX	5,149,797	09/22/92	Pederson et al.	536	27
	CY	5,166,315	11/24/92	Summerton et al.	528	406

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Examiner Initial		Document No.	Date	Country	Translation YES NO
	CZ	WO 95/28640	10/26/95	PCT	X

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List of Patent and Publications
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	DB	5,177,196	01/05/93	Meyer, Jr. et al.	536	22.1
	DC	5,177,198	01/05/93	Spielvogel et al.	536	25.33
	DD	5,185,444	02/09/93	Summerton et al.	544	81
	DE	5,188,897	02/23/93	Suhadolnik et al.	428	402.2
	DF	5,214,134	05/25/93	Weis et al.	536	25.3
	DG	5,214,136	05/25/93	Lin et al.	514	44
	DH	5,216,141	06/01/93	Benner	536	27.13
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	DR	5,264,423	11/23/93	Cohen et al.	514	44
	DS	5,264,562	11/23/93	Matteucci	536	23.1
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	DU	5,272,250	12/21/93	Spielvogel et al.	530	300
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	DY	5,292,873	03/08/94	Rokita et al.	536	24.3
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	EQ	5,416,203	05/16/95	Letsinger	536	25.34
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	ES	5,434,257	08/18/95	Matteucci et al.	536	24.3

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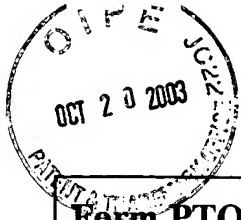
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	EX	5,457,187	10/10/95	Gmeiner et al.	536	25.5
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	FF	5,486,603	06/23/96	Buhr	536	24.3
	FG	5,489,677	02/06/96	Sanghvi et al.	536	22.1
	FH	5,491,133	02/13/96	Walder et al.	514	44

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List of Patent and Publications
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Docket No.
ISIS0085-100

Serial No.
10/649,467

Applicant
Lex M. Cowsert

Filing Date
August 27, 2003

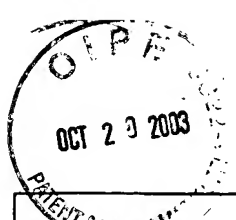
Group
Not Yet Assigned

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Examiner Initial		Document No.	Date	Name	Class	Subclass
	FI	5,502,177	03/26/96	Matteucci et al.	536	26.6
	FJ	5,508,270	04/16/96	Baxter et al.	514	47
	FK	5,510,475	04/23/96	Agrawal et al.	536	24.3
	FL	5,512,439	04/30/96	Hornes et al.	435	6
	FM	5,512,667	04/30/96	Reed et al.	536	24.31
	FN	5,514,785	05/07/96	Van Ness et al.	536	22.1
	FO	5,519,126	05/21/96	Hecht	536	24.3
	FP	5,519,134	05/21/96	Acevedo et al.	544	243
	FQ	5,523,389	06/04/96	Ecker et al.	536	23.1
	FR	5,525,465	06/11/96	Haralambidis et al.	435	6
	FS	5,525,711	06/11/96	Hawkins et al.	536	22.1
	FT	5,529,756	06/25/96	Brennan	422	131
	FU	5,536,821	07/16/96	Agrawal et al.	536	22.1
	FV	5,539,082	07/23/96	Nielsen et al.	530	300
	FW	5,541,306	07/30/96	Agrawal et al.	536	22.1

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	FX	5,541,313	07/30/96	Ruth	536	24.3
	FY	5,541,307	07/30/96	Cook et al.	536	23.1
	FZ	5,543,508	08/06/96	Haseloff et al.	536	23.2
	GA	5,545,730	08/13/96	Urdea et al.	536	28.51
	GB	5,550,111	08/27/96	Suhadolnik et al.	514	44
	GC	5,552,538	09/03/96	Urdea et al.	536	24.3
	GD	5,552,540	09/03/96	Haralambidis	536	25.34
	GE	5,554,613	09/10/96	Mallion	514	253
	GF	5,561,225	10/01/96	Maddry et al.	536	23.1
	GG	5,563,036	10/08/96	Peterson et al.	435	6
	GH	5,563,253	10/08/96	Agrawal et al.	536	22.1
	GI	5,565,350	10/15/96	Kmiec	435	172.3
	GJ	5,565,552	10/15/96	Magda et al.	534	11
	GK	5,567,810	10/22/96	Weis et al.	536	25.3
	GL	5,567,811	10/22/96	Misiura et al.	536	25.34
	GM	5,571,799	11/05/96	Tkachuk et al.	514	47
	GN	5,574,142	11/12/96	Meyer, Jr. et al.	536	23.1

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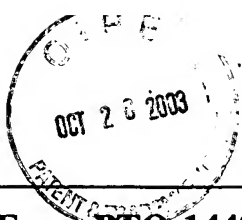
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Examiner Initial		Document No.	Date	Name	Class	Subclass
	GO	5,576,427	11/19/96	Cook et al.	536	23.1
	GP	5,578,717	11/26/96	Urdea et al.	536	26.1
	GQ	5,578,718	11/26/96	Cook et al.	536	27.21
	GR	5,580,731	12/03/96	Chang et al.	435	6
	GS	5,585,481	12/17/96	Arnold, Jr. et al.	536	25.33
	GT	5,587,361	12/24/96	Cook et al.	514	44
	GU	5,587,371	12/24/96	Sessler et al.	514	185
	GV	5,587,469	12/24/96	Cook et al.	536	23.1
	GW	5,591,584	01/07/97	Chang et al.	435	6
	GX	5,591,722	01/07/97	Montgomery et al.	514	45
	GY	5,594,121	01/14/97	Froehler et al.	536	23.5
	GZ	5,595,726	01/21/97	Magda et al.	424	9.61
	HA	5,596,086	01/21/97	Matteucci et al.	536	22.1
	HB	5,596,091	01/21/97	Switzer	536	24.5
	HC	5,597,696	01/28/97	Linn et al.	435	6

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	HD	5,597,909	01/28/97	Urdea et al.	536	24.3
	HE	5,599,923	02/04/97	Sessler et al.	540	145
	HF	5,599,928	02/04/97	Hemmi et al.	540	474
	HG	5,602,240	02/11/97	De Mesmaeker et al.	536	23.1
	HH	5,608,046	03/04/97	Cook et al.	536	23.1
	HI	5,610,289	03/11/97	Cook et al.	536	25.34
	HJ	5,610,300	03/11/97	Altmann et al.	544	244
	HK	5,614,617	03/25/97	Cook et al.	536	23.1
	HL	5,618,704	04/08/97	Sanghvi et al.	435	91.5
	HM	5,623,065	04/22/97	Cook et al.	536	23.1
	HN	5,623,070	04/22/97	Cook et al.	536	27.6
	HO	5,625,050	04/29/97	Beaton et al.	536	24.1
	HP	5,627,053	05/06/97	Usman et al.	435	91.1
	HQ	5,633,360	05/27/97	Bischofberger et al.	536	22.1
	HR	5,639,873	06/17/97	Barascut et al.	536	25.3

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Not Yet Assigned**U. S. PATENT DOCUMENTS**

Examiner Initial		Document No.	Date	Name	Class	Subclass
	HS	5,646,265	07/08/97	McGee	536	25.34
	HT	5,652,355	07/29/97	Metelev et al.	536	24.5
	HU	5,652,356	07/29/97	Agrawal	536	24.5
	HV	5,658,873	08/19/97	Bertsch-Frank et al.	510	375
	HW	5,663,312	09/02/97	Chaturvedula	536	22.1
	HX	5,670,633	09/23/97	Cook et al.	536	23.1
	HY	5,677,437	10/14/97	Teng et al.	536	23.1
	HZ	5,677,439	10/14/97	Weis et al.	536	23.1
	IA	5,681,941	10/28/97	Cook et al.	536	23.1
	IB	5,688,941	11/18/97	Cook et al.	536	25.3
	IC	5,693,463	12/02/97	Edwards et al.	435	6
	ID	5,696,248	12/09/97	Peyman et al.	536	22.1
	IE	5,700,920	12/23/97	Altmann et al.	536	221
	IF	5,700,922	12/23/97	Cook	536	23.1
	IG	5,708,158	01/13/98	Hoey	536	23.5

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	IH	5,714,331	02/03/98	Buchardt et al.	435	6
	II	5,716,780	02/10/98	Edwards et al.	435	6
	IJ	5,719,262	02/17/98	Buchardt et al.	530	300
*	IK	08/465,880	06/06/95	Cook		
*	IL	08/468,037	06/06/95	Cook et al.		
*	IM	08/762,488	12/01/96	Cook et al.		

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EXAMINER**DATE CONSIDERED**

*Pursuant to 37 C.F.R. 1.97(a)(2)(iii), no copy of a U.S. patent application need be included with an Information Disclosure Statement filed under 37 C.F.R. 1.97.



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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	IN	Ghosh, M.K. et al., "Evaluation of some properties of a phosphorodithioate oligodeoxyribonucleotide for antisense application," <i>Nucl. Acid Res.</i> , 1993 , 21(24), 5761-5766	
	IO	Mirabelli, C.K. et al., "In vitro and in vivo pharmacologic activities of antisense oligonucleotides," <i>Anti-Cancer Drug Des.</i> , 1991 , 6, 647-661	
	IP	Uhlmann, E. et al., "Antisense Oligonucleotides: A New Therapeutic Principle," <i>Chem. Reviews</i> , 1990 , 90(4), 544-584	
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Examiner Initial		Document No.	Date	Name	Class	Subclass
	AD	4,806,463	02/21/89	Goodchild et al.	435	5
	IQ					
	AMR	5,436,327	07/25/95	Southern et al.	536	25.34
	IS	5,612,455	03/18/97	Hoey	530	350
	IT	5,700,637	12/23/97	Southern	435	6
	IU	5,824,485	10/20/98	Thompson et al.	435	6

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES NO
	AI	WO 89/10977	11/16/89	PCT	X

EXAMINER**DATE CONSIDERED**



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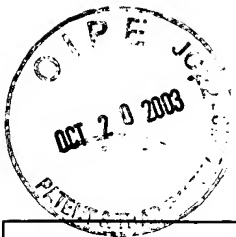
U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	IV	5,697,248	12/16/97	Brown et al.	73	290

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Examiner Initial		Document No.	Date	Name	Class	Subclass
	IW	5,696,248	12/09/97	Peyman et al.	536	22.1

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Examiner Initial		Document No.	Date	Country	Translation YES NO	

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	IX	5,463,564	10/31/95	Agrafiotis, et al.	364	496
	IY	5,639,603	06/17/97	Dower, et al.	435	6
	IZ	5,650,122	07/22/97	Harris, et al.	422	81
	JA	5,684,711	11/04/97	Agrafiotis, et al.	364	500
	JB	5,720,923	07/22/97	Harris, et al.,	422	68.1

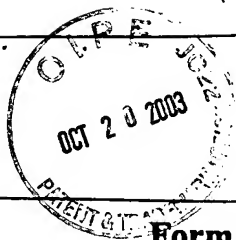
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*	JC	WO 93/04204	03/04/93	PCT		
*	JD	WO 98/03533	01/29/98	PCT		
	JE	WO 98/37242	08/27/98	PCT		
	JF	0 514 927	11/1992	EPO		

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* Cited on the EPO Supplemental Partial European Search Report dated March 28, 2003.



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	JG	5,697,248	12/16/97	Brown et al.	73	290
	JH	4,806,463	02/21/89	Goodchild et al.	435	5
	JJ	5,436,327	07/25/95	Southern et al.	536	25.34
	JK	5,612,455	03/18/97	Hoey	530	350
	JL	5,700,637	12/23/97	Southern	435	6
	JM	5,824,485	10/20/98	Thompson et al.	435	6

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	JN	Cooper, H.D., et al., "Software of determine optimal oligonucleotide sequences based on hybridization simulation data, <i>Biotechniques</i> , June 1996, 20(6), 1096-1097 (Abstract only)	
	JO	DeCamp, D., et al., "Site-directed drug design," <i>Protein Engineering, Principles and Practice</i> , Cleland, J.L., et al. (Ed.), 1996, Chapter 17, 467-472	
	JP	Genome Analysis - A Laboratory Manual, "Analyzing DNA," 1997, Vol. 1, 574-578	
	JQ	Lomakin, A., et al., "A theoretical analysis of specificity of nucleic acid interactions with oligonucleotides and peptide nucleic acids (PNAs)," <i>J. Molecular Biology</i> , February 13, 1998, 276(1), 1-24	
	JR	Parzel, V., et al., "Theoretical design of antisense RNA structures substantially improves annealing kinetics and efficacy in human cells," <i>Nat. Biotechnol</i> , January 1998, 16(1), 24 (Abstract only)	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	JS	<i>Development of Medicine, 1998, 184(3), 225-231 (No English translation is available)</i>	
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